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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,679	08/09/2001	Nagayuki Takao	0152-0574P-SP	2364
2292	7590	04/12/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SHOSHO, CALLIE E	
		ART UNIT	PAPER NUMBER	
		1714		

DATE MAILED: 04/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/924,679	TAKAO ET AL.	
	Examiner	Art Unit	
	Callie E. Shosho	1714	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 3/15/04 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) The period for reply expires ____ months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. A Notice of Appeal was filed on 15 December 2003. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. The proposed amendment(s) will not be entered because:
 - (a) they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) they raise the issue of new matter (see Note below);
 - (c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. Applicant's reply has overcome the following rejection(s): _____.
4. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-3 and 5-20.

Claim(s) withdrawn from consideration: _____.

8. The drawing correction filed on _____ is a) approved or b) disapproved by the Examiner.

9. Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.

10. Other: _____

Callie E. Shosho
Primary Examiner
Art Unit: 1714

Attachment to Advisory Action

1. Applicants' response filed 3/15/04 has been fully considered, however, it is not persuasive.

Specifically, applicants argue that JP 53140105 is not a relevant reference against the present claims given that JP 53140105 is silent with respect to quick drying properties and further given that JP 53140105 does not disclose or suggest that quick drying property imparting agent is added to shorten fixing time.

It is agreed that there is no disclosure in JP 53140105 of quick-drying properties and thus, no disclosure of quick-drying imparting agent as required in the present claims. However, this is why JP 53140105 is used in combination with either Kitamura et al. (U.S. 6,498,222) or Ohta et al. (U.S. 6,211,265) which each disclose the use of 1H-benzotriazole-1-methanol that is identical to quick-drying imparting agent utilized in the present invention. Although there is no disclosure in either Kitamura et al. or Ohta et al that 1H-benzotriazole-1-methanol functions as a quick-drying imparting agent to shorten fixing time, given that Kitamura et al. and Ohta et al. each disclose benzotriazole compound identical to that presently claimed, it is clear that the benzotriazole would intrinsically possess quick-drying imparting properties.

Applicants also argue that while either Kitamura et al. or Ohta et al disclose 1H-benzotriazole-1-methanol in ink, there is no disclosure that this compound is a quick-drying

property imparting agent wherein the ink utilizes differences in solubility between the quick-drying property imparting agent in water and solvent to attain quick drying properties.

However, while it is agreed that Kitamura et al. disclose the use of 1H-benzotriazole-1-methanol to prevent nozzle clogging and Ohta et al. disclose the use of 1H-benzotriazole-1-methanol to prevent ink from drying at the tip of printer nozzle (dissolution accelerator), it is noted that while these motivations may not be the same motivation for using 1H-benzotriazole-1-methanol as in the present invention, it is noted that obviousness under 103 is not negated because the motivation to arrive at the claimed invention as disclosed by the prior art does not agree with appellant's motivation. *In re Dillon*, 16 USPQ2d 1897 (Fed. Cir. 1990), *In re Tomlinson*, 150 USPQ 623 (CCPA 1996).

Further, applicants argue that the disclosure in either Kitamura et al. or Ohta et al. of 1H-benzotriazole-1-methanol as anticlogging agent or dissolution accelerator, respectively, is contradictory to the claimed invention.

However, it is noted that (i) regardless of what Kitamura et al. or Ohta et al. call the 1H-benzotriazole-1-methanol, the fact remains that each reference disclose benzotriazole that is identical to that presently claimed and (ii) given that Kitamura et al. and Ohta et al. each disclose 1H-benzotriazole-1-methanol identical to that presently claimed, such compound would therefore intrinsically possess same quick-drying imparting properties as the claimed benzotriazole. The courts have held that "a compound and all its properties are mutually inseparable", *In re Papesch*, 315F.2d 381, 137 USPQ 42, 51 (CCPA 1963). Further, attention is drawn to MPEP 2112.01, which states "products of identical chemical composition

can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present", *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Thus, given that Kitamura et al. and Ohta et al. each disclose 1H-benzotriazole-1-methanol as presently claimed, it is clear that such compound would intrinsically impart quick drying properties.

Applicants also argue that JP 53140105 is not a relevant reference against the present claims given that JP 53140105 utilizes high-boiling point solvent such as ethylene glycol monoethyl ether which is in direct contrast to the present claims which require the use of water-soluble solvent having boiling point lower than that of water.

However, it is noted that while JP 53140105 disclose the use of high boiling point solvent such as ethylene glycol monoethyl ether, this is but one of the solvents disclosed by JP 53140105. It is significant to note that JP 53140105 also discloses the use of solvent with boiling point less than water such as methyl ethyl ketone, acetone, ethanol, and propanol. Thus, absent evidence to the contrary, it would have been obvious to one of ordinary skill in the art to choose solvent, including that presently claimed with boiling point less than water, in the ink of JP 53140105, and thereby arrive at the claimed invention.

Applicants also argue that claim 22 of Kitamura et al. teach the use of solvent having lower vapor pressure than water which is in direct contrast to the present claims which require solvent with vapor pressure higher than that of water.

However, it is noted that claim 22 of Kitamura et al. also discloses the use of lower alcohols which have boiling point lower than water and thus meet the requirements of the present claims regarding the solvent.

Applicants also argue that Ohta et al. disclose the use of water-soluble solvent that has vapor pressure lower than that of water, which is in direct contrast to the present claims that require solvent with vapor pressure greater than water.

It is agreed that Ohta et al. disclose the use of water-soluble solvent that has vapor pressure lower than that of water, which is why Ohta et al. is no longer applicable against the present claims as a primary reference. Ohta et al. is now only used in combination with JP 53140105 to teach the use of 1H-benzotriazole-1-methanol. It is the examiner's position that Ohta et al. is still a relevant reference against the present claims given that Ohta et al. is not used for its teaching of the presently claimed water-soluble solvent given that JP 53140105 already teaches the use of such solvent. Rather, Ohta et al. is only used for its teaching of 1H-benzotriazole-1-methanol.

Applicants also argue that Ohta et al. do not disclose the use of fluorescent dye.

However, it is noted that only claims 13-15 require the use of fluorescent dye. Further, note that Ohta et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely the use of 1H-benzotriazole-1-methanol in ink jet inks, and in combination with the primary reference, discloses the presently claimed invention.

Applicants also argue that there is no motivation to combine JP 53140105 with either Kitamura et al. or Ohta et al.

However, it is noted that JP 53140105 discloses ink jet ink comprising water, solvent including monovalent alcohol, water-soluble polymer, and fluorescent dye, however, there is no disclosure in JP 53140105 of quick-drying property imparting agent as presently claimed. Kitamura et al. and Ohta et al., each of which are drawn to ink jet inks, disclose the use of 1H-benzotriazole-1-methanol which is identical to the quick-drying property imparting agent presently claimed. Thus, given that Kitamura et al. and Ohta et al. are each drawn to the same field of endeavor as JP 53140105, i.e. ink jet inks, and each disclose motivation for using 1H-benzotriazole-1-methanol, i.e. prevent clogging of printer nozzles (Kitamura et al.) or dissolution accelerator to prevent ink from drying at tip of printer nozzles (Ohta et al.), it is the examiner's position that there is proper motivation to combine the references.

Applicants also argue that Doi et al. (U.S. 6,378,999) is primarily drawn to pigment ink and do not disclose the use of dye that has solubility in water lower than solubility in water-soluble solvent to attain good drying properties as presently claimed.

However, while Doi et al. may prefer pigments, it is significant to note that Doi et al. also disclose the use of water-insoluble dyes that would clearly intrinsically possess solubility in water lower than solubility in water-soluble solvent. Further, even if Doi et al. did not possess dye identical to that presently claimed, note that Doi et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely surfactants utilized in ink jet inks, and in combination with the primary reference, discloses the presently claimed invention.

Applicants argue that none of the cited references discloses or suggests the use of benzotriazole especially for use on impermeable sheet. However, it is noted that there is no requirement in the present claims that the benzotriazole is used on impermeable sheet. Further, even if such limitation were present, given that Kitamura et al. or Ohta et al. disclose 1H-benzotriazole-1-methanol identical to that presently claimed, it is clear that such compound would intrinsically be suitable for use on impermeable sheet.

It is noted that on page 8 of the response filed 3/15/04, applicants argue that Yatake et al. (U.S. 6,051,057) is not a relevant reference against the present claims. However, as set forth in paragraph 1 of the Advisory Action mailed 1/27/04, in light of applicants' amendment filed 1/9/04, Yatake et al. is no longer applicable against the present claims.

CS
4/7/04



Callie E. Shosho
Primary Examiner
Art Unit 1714